IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1-46   (Canceled)

47.   (Previously Presented) A device to perform a memory file management, comprising:

a microcontroller to receive a request to read a file stored in a memory or to write a file

into a memory, and to build a lookup table ("LUT") for the memory, wherein the memory has a

fragmented array of files across a single partition;

a processor coupled to the microcontroller to store the LUT at least temporarily, wherein

the processor is to use the LUT to create an index table and to store the index table in the

memory, wherein the index table specifies a plurality of addresses for the file in the memory.

48.   (Previously Presented) The device of claim 47, wherein the memory is a flash memory.

49.   (Previously Presented) The device of claim 48, wherein the flash memory is a

SmartMedia card.

50.   (Previously Presented) The device of claim 49, wherein the SmartMedia card includes a

flash-memory chip, a plane electrode, and bonding wires, which are embedded in a resin using

an over-molded thin package technique.

51.   (Previously Presented) The device of claim 47 further comprising a keypad coupled to the microcontroller.

52.   (Previously Presented) The device of claim 47, wherein the microcontroller and the processor are incorporated into a portable package.

53.   (Previously Presented) The device of claim 47, wherein the microcontroller is 8051 microcontroller.

54.   (Previously Presented) The device of claim 47, wherein the microcontroller and the processor are included into a portable MP3 player.

55.   (Previously Presented) The device of claim 47, wherein a file is an MP3 file, an WMA file, an AAC file, a CD audio format file, or any combination thereof.

56.   (Previously Presented) The device of claim 47, wherein the processor and the microcontroller are included into a personal computer system.

57.   (Previously Presented) The device of claim 47, wherein the index table in the memory includes a table of records readable by the processor.

58.   (Previously Presented) The device of claim 47, wherein the microcontroller to build a LUT is to parse a file allocation table of the memory to locate all clusters associated with all files located in the memory.

59. (Previously Presented) The device of claim 47, wherein the microcontroller to build the LUT is to convert file clusters associated with the file into logical sectors.

60. (Previously Presented) The device of claim 59, wherein the microcontroller to build the LUT is to map the logical sectors of the file to respective physical sectors.

61. (Previously Presented) The device of claim 47, wherein the microcontroller is to provide a pointer into the index table data of the file.

62. (Previously Presented) The device of claim 61, wherein the processor is to access data for the file from the memory using the pointer into the index table data of the file.

63. (Previously Presented) The device of claim 47, wherein the microcontroller to write the file is further to search a file allocation table to find an empty space within the memory to store the file.

64. (Previously Presented) The device of claim 47, wherein the microcontroller to write the file is further to allocate empty clusters within the memory for the file.

65. (Previously Presented) The device of claim 47, wherein the microcontroller to write the file is further to store the file in empty clusters in the memory.

66.   (Previously Presented) The device of claim 47, wherein the microcontroller to write the

file further is to include the file written into the memory into a directory tree.

67.   (Previously Presented) A device to read and write files in a flash memory, comprising:

        a microcontroller to receive a request to read a file stored in a flash memory or to write a

file into a flash memory, and to build a lookup table ("LUT") for the flash memory, wherein the

flash memory has a fragmented array of files across a single partition;

        a digital signal processor ("DSP") coupled to the microcontroller to store the LUT at least

temporarily, wherein the DSP is to use the LUT to create an index table and to store the index

table in the flash memory, wherein the index table specifies physical addresses for each file in

the flash memory.

68.   (Previously Presented) The device of claim 67, wherein the microcontroller and the DSP

are incorporated into a portable package.

69.   (Previously Presented) The device of claim 67, wherein the flash memory is

a SmartMedia card.

70.   (Previously Presented) The device of claim 69, wherein the SmartMedia card includes a

flash-memory chip, a plane electrode, and bonding wires, which are embedded in a resin using

an over-molded thin package technique.

71.   (Previously Presented) The device of claim 67, wherein the microcontroller is 8051

microcontroller.

72.   (Previously Presented) The device of claim 67, wherein the portable package is an MP3 player.

73.   (Previously Presented) The device of claim 67, wherein a file is an MP3 file, an WMA file, an AAC file, a CD audio format file, or any combination thereof.

74.   (Previously Presented) The device of claim 67, wherein the DSP and the microcontroller are included into a personal computer device.

75.   (Previously Presented) The device of claim 67, wherein the microcontroller to build a LUT is to parse a file allocation table of the flash memory to locate all clusters associated with all files located on the flash memory.

76.   (Previously Presented) The device of claim 67, wherein the microcontroller to build the LUT is to convert file clusters associated with each file into logical sectors.

77.   (Previously Presented) The device of claim 67, wherein the microcontroller to build the LUT is to map the logical sectors of the file to respective physical sectors.

78.   (Previously Presented) The device of claim 67, wherein the microcontroller is further to provide a pointer into the index table data of a file.

79.   (Previously Presented) The device of claim 78, wherein the DSP is further to access data

for the file from the flash memory using the pointer into the index table data of the file.

80.   (Previously Presented) The device of claim 67, wherein the microcontroller to write the

file is further to search a file allocation table to find an empty space within the memory to store

the file.

81.   (Currently Amended) The device of claim [[63]] 67, wherein the microcontroller to write

the file is further to allocate empty clusters within the memory for the file.

82.   (Previously Presented) The device of claim 67, wherein the microcontroller to write the

file is further to store the file in empty clusters in the memory.

83.   (Previously Presented) The device of claim 67, wherein the microcontroller to write the

file to the memory is further to include the file written into the memory into a directory tree.